

**Duncansville Municipal Authority Water & Sewer
Duncansville, Pennsylvania 16635**

Water & Sewer Dept.
R. CHARLENE DAVIS, Billing Clerk
Borough Building
1146 Third Avenue
P.O. Box 308
Duncansville, Pa 16635

Office Hours:
8:00 a.m. to 4:30 p.m.
Monday thru Friday

Phone: (814) 695-0354
Fax: (814) 695-4105

November 5, 2010

Water Docket
Environmental Protection Agency
Mailcode: 28221T
1200 Pennsylvania Ave., NW.
Washington, DC 20460

Docket EPA R03-OW-2010-0736

**RE: Chesapeake Bay TMDL's
Proposed Backstop TMDL's for Wastewater Treatment Plants in Pennsylvania
Susquehanna River Watershed -**

Dear Sir;

The Duncansville Municipal Authority in Blair County, Pennsylvania has just completed a \$11 million dollar project to upgrade and expand its wastewater treatment plant. Construction was completed in July 2010. A large portion of this project was undertaken because the Authority had been issued a new NPDES permit in September 28, 2007. That permit required the removal of total nitrogen (TN) and total phosphorous (TP) down to much lower levels than the previous plant had been capable of achieving. The new levels include annual cap loads for TN and TP and are summarized below:

	<u>Previous Permit Limits</u>	<u>Sept. 28, 2007 Permit Limits</u>
Design Flow	1.217 mgd	1.75 mgd
CBOD ₅	25 mg/l	25 mg/l
TSS	30 mg/l	30 mg/l
NH ₃ -N (Nov-Oct)	3.5 mg/l	3.5 mg/l
NH ₃ -n (Nov-April)	9.0 mg/l	9.0 mg/l
TN	NA Monitor/Report	6.0 mg/l*
TP	NA Monitor/Report	0.8 mg/l*
Annual Cap Load TN	NA	22,228 lbs/yr
Annual Cap Load TP	NA	2,963 lbs/yr
TN @ 1.75 mgd	NA	4.17 mg/l
TP @ 1.75 mgd	NA	0.55 mg/l

*Based on cap load limits @ 1.217 mgd

The Authority constructed chemical addition facilities, denitrification filter and an effluent pump station to ensure that the plant had TN and TP removal capabilities to the levels required to meet the annual cap loads contained in the September 28, 2007 permit.

The Authority had to increase the billed rates to its customers significantly as a result of this project. The monthly sewer bill had been \$37 per month before this project. As a result of the project, a typical monthly residential sewer bill (4,000 gallons per month) has increased to \$62 per month. This is a 67% increase above

the previous monthly sewer rate. Customers using more than 4,000 gallons per month are paying even higher monthly charges.

These rates would be much higher had the Authority not received substantial grant funds to help reduce costs to the local customers.

The Authority is now aware that the U.S. EPA is considering levying “backstop TMDLs” on the Duncansville plant that will reduce its annual cap load to 4,695 pounds per year for TN and 97 pounds per year for TP. At these annual loadings, the average daily flow concentration for TN and TP has to be as follows:

Parameter	Proposed Backstop TMDL	Avg. Concentration @ 1.75 mgd	Current Limit of Technology	Comparison with Technology Limits
TN	4,695 lbs/yr	0.88 mg/l	3.0 mg/l	3.4 times less
TP	97 lbs/yr	0.018 mg/l	0.1 mg/l	5.5 times less

Our newly constructed plant upgrade cannot meet the proposed “Backstop TMDL” limits at the plant design flow of 1.75 mgd. Since we have infiltration and inflow (I/I) in our sewer system, wet weather flows exceed our daily design flow capacity and the presence of TMDLs as low as the ones proposed only accentuates the problem of meeting a daily limit for TN and TP.

If the Backstop TMDL limits become part of our NPDES permit, then we will be forced to construct yet another plant upgrade and incur additional costs, which would have to be passed on to our sewer customers. We find the prospect of embarking on yet another plant upgrade so soon after completing the present upgrade to be infeasible. Our community is not a wealthy community by any means. Increasing sewer rates even more, particularly in these difficult economic times, is not a situation we want to face.

Questions and Comments

1. The EPA admits that the current limit of technology is 3.0 mg/l for TN and 0.1 mg/l for TP. Since that is the case, why is Duncansville being asked to do what current technology cannot achieve?
2. Why isn't Duncansville's cap load limits based on current technology limits?
3. Why is Duncansville being asked to achieve these lower limits when we just completed a very expensive plant upgrade to achieve annual cap loads for the Chesapeake Bay's protection?
4. The newly constructed plant upgrades cannot achieve the proposed new TMDL backstop levels. The denitrification filter system is designed to remove TN using methanol. Overdosing with methanol does not guarantee further reductions in TN without causing other operational difficulties and effluent degradation. For example, overdosing of methanol could lead to excess methanol in the effluent which adds CBOD₅ in the effluent. Also this is wasteful of an expensive chemical. Furthermore the on-line continuous nitrate monitoring system cannot measure down to the levels needed to accurately and reliably prevent overdosing. Excess methanol also triggers production of sulfide reducing bacteria and this then begins causing H₂S gas generation. Effluent quality would drop due to presence of higher TSS. Odor generation requires odor treatment, yet another expense to deal with.

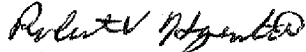
Further downstream unit processes would be needed to remove additional TN and TP down to the levels under the capabilities of the present new denitrification system. And as U.S. EPA admits, current technology cannot reliably get effluents below 3.0 and 0.1 mg/l for TN and TP respectively.

5. If Backstop TMDL's become official, 100% grant funding and assistance with operation and maintenance costs increases is needed. Will the Federal government step up and provide this? Where will these funds come from? Further taxes on the general population to pay for this is merely squeezing the same Duncansville sewer customer as a sewer rate increase.

6. In Pennsylvania, we are facing significant electric power and natural gas rate increases in January 2011. These will drastically impact our annual treatment plant operational expenses and require sewer rates to rise just due to that. Furthermore our sewer customers will see these same electric and gas rate increases on their own home and business utility bills.
7. We think that the dredging dams on the Susquehanna River to remove sediments and entrained phosphorous is an excellent idea and should be funded and handled by the Federal Government via the US Army Corps of Engineers.
8. We think the State and U.S. EPA should look to other sources of nitrogen and phosphorous contributing to the Chesapeake Bay to do their fair share of TN and TP removal. This would spread the cost over the entire general population and should include other Bay States as well as Pennsylvania.
9. Targeting Bay watershed communities and businesses in Pennsylvania to remove 55% of incoming TN and TP to the Bay puts these affected portions of Pennsylvania at a severe economic disadvantage compared to businesses and communities that are outside the Bay watershed, even in Pennsylvania. Sewage treatment costs have already risen and will continue to rise for these communities and businesses while competitors outside of the Bay watershed are unaffected.

Please allow time for the Chesapeake Bay Tributary Strategy, developed by the Commonwealth of Pennsylvania, to be implemented and to serve as the Commonwealth's plan for addressing the Chesapeake Bay water quality issues. Our biggest fear is that all of this money will be spent and it will end up having no measurable impact to water quality in the Bay due to impacts and forces not currently known or recognized as contributors to the Bay problems. Thank you.

Sincerely,
The Duncansville Municipal Authority



Robert V. Hazenstab, Chairman

cc: DEP Water Planning Office
US Senator Robert Casey, Jr.
Congressman Bill Shuster
State Senator John Eichelberger, Jr.
State Representative Jerry Stern
Duncansville Borough Council
Blair County Planning Commission
Blair County Commissioners